

## ABSTRACT

An improved method and system for motion-compensated temporal interpolation of video frames during video processing for computer video images, video games and other video effects where changes of an object's form or movement exist. One or more new intermediate video frames are generated and introduced in a processed video sequence in order to produce the appearance of more realistic motion of subjects. Information is obtained from existing video frames and an improved motion estimation algorithm, one that determines the true motion vectors of subject movement, is applied to re-create one or more missing frames. The addition of intermediate video frames further allows for an increase in the viewable frame rate and thereby provides improved frame-by-frame continuity of movement.

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